

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

King County Home Sales

By: Konnor Clark



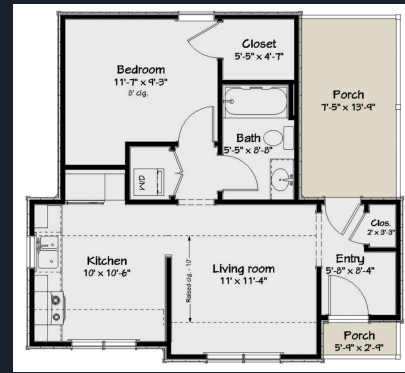
Overview and Business Understanding

You and your real estate agency assist homeowners in buying and selling their home.

You would like to provide your homeowners advice about how renovations may increase the value of their home.

Business Questions

- What features of a home increase its value?
 - Square Footage
 - Grade
 - Bathrooms



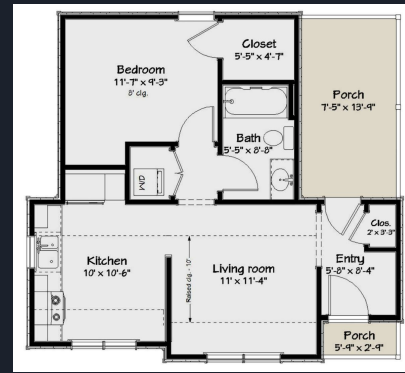
Business Questions

- Which features increase a home's value the most?
 - Square Footage



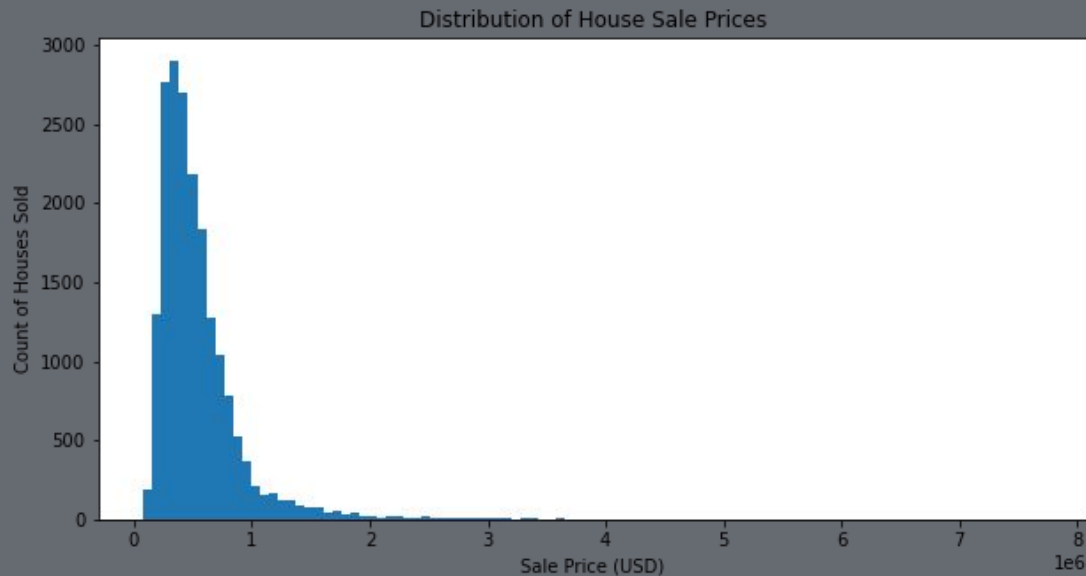
Business Questions

- By what amount could these features increase a home's value?
 - Square Footage = \$182 per square foot
 - Grade = \$127,477 per grade level
 - Bathrooms = \$50,786 per additional bathroom



Data Understanding and Analysis

- King County House Sales dataset, 2014-2015.
- 21 different features for each home
- Over 21,000 home sales



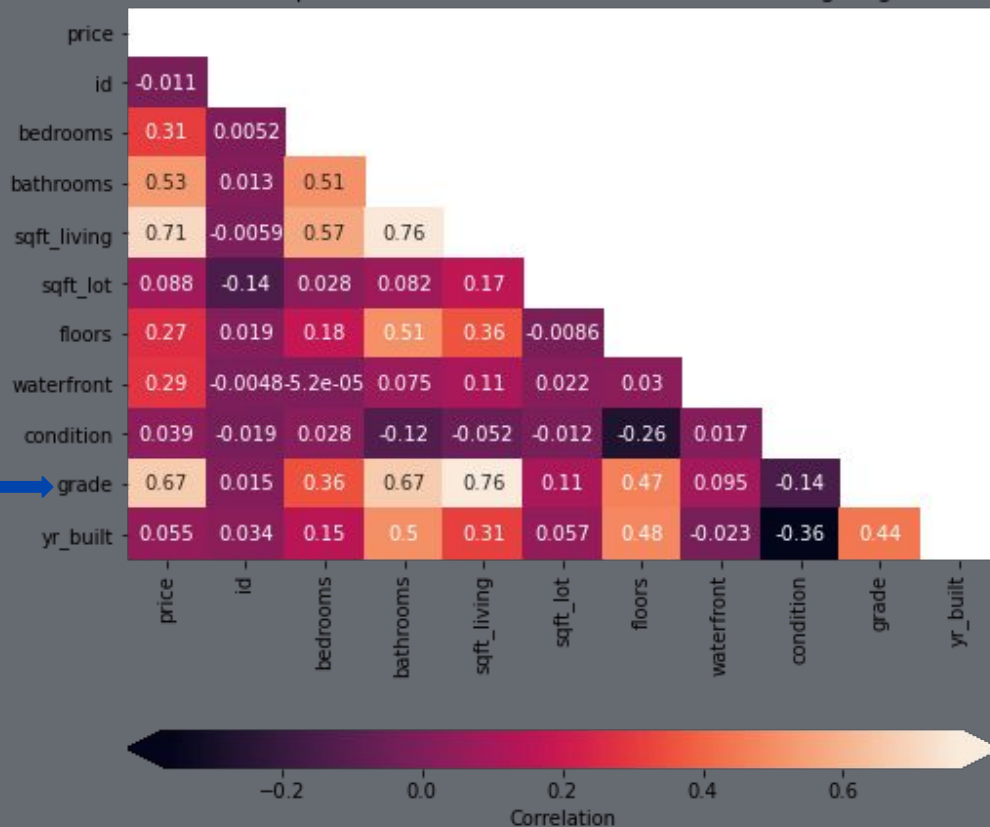


Data Understanding and Analysis

- Of the 21 total features, 5 of the most relevant:
 - **Square Feet (Living Space)**
 - Bedrooms
 - **Grade**
 - Condition (related to maintenance of the home)
 - **Bathrooms**

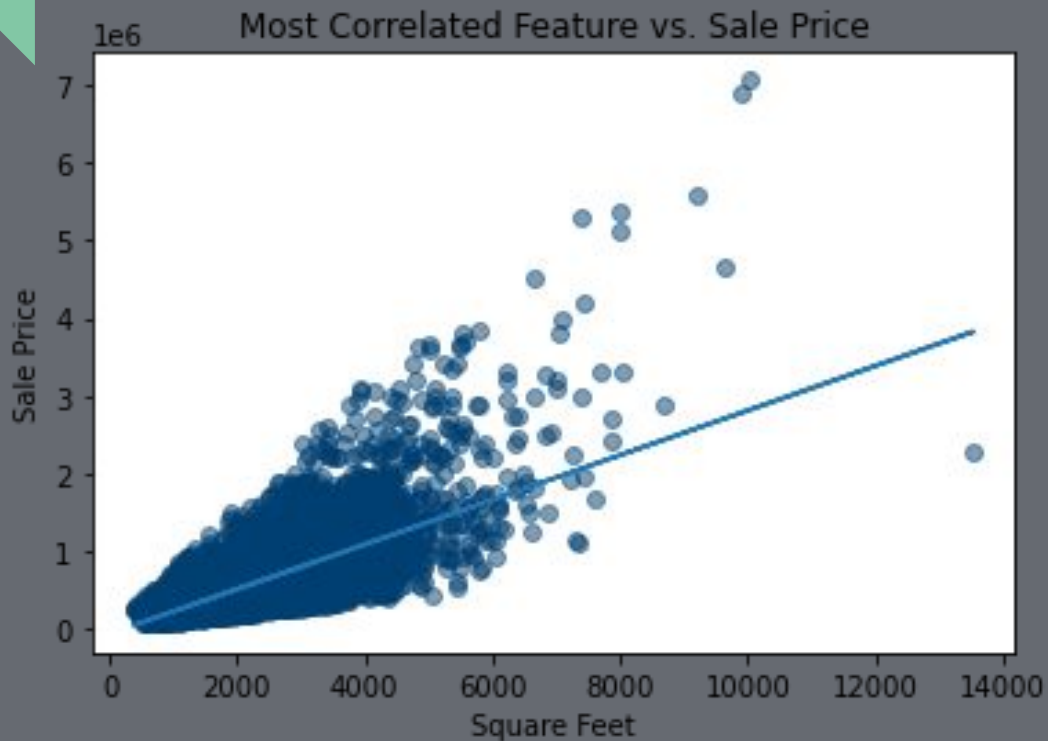
Data Understanding and Analysis

Heatmap of Correlation Between Attributes (Including Target)



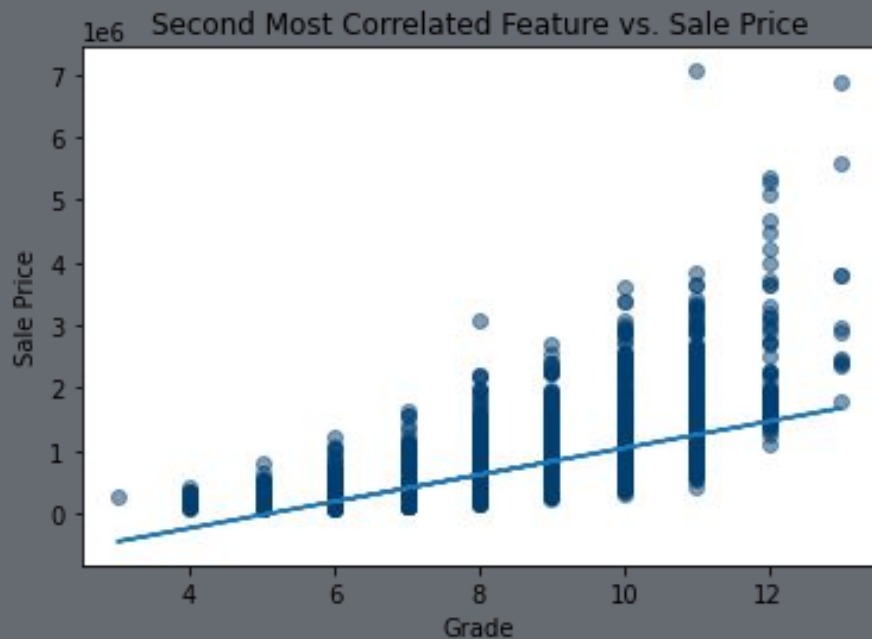
- Closer to 1 = closer relationship to sale price.
- Highest Features:
 - Bathrooms,
 - Square Foot Living
 - Grade

Data Understanding and Analysis



- Diagonal Line shows:
 - Increase in Square Feet
 - Increase in Sale Price

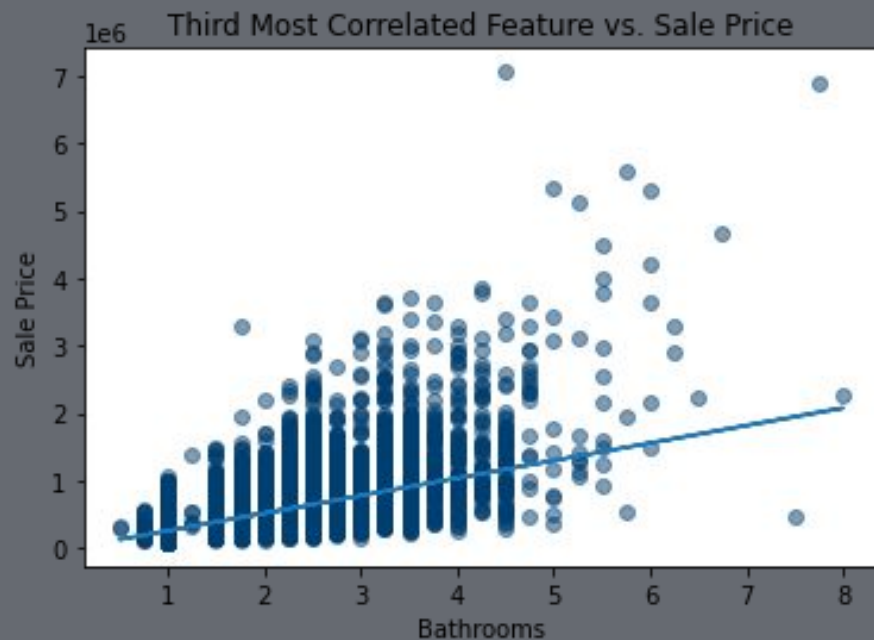
Data Understanding and Analysis



- Diagonal Line shows:
 - Increase in Grade
 - Increase in Sale Price

Data Understanding and Analysis

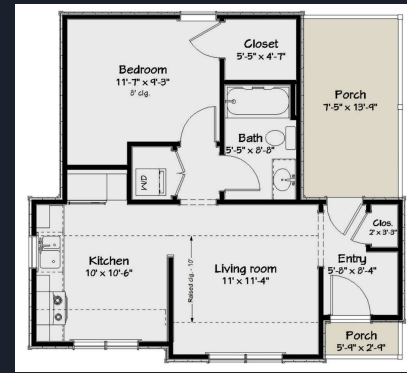
- Diagonal Line shows:
 - Increase in Bathrooms
 - Increase in Sale Price




Recommendations

Homeowners should:

- Increase the square footage of their home
- Elevate the grade of their home by improving construction materials and design.
- Increase the number of bathrooms in their home.





Next Steps

- My model was able to explain 65.3% of the variance of the price of a home, so professional evaluations and adjustments by experts in the field are still needed, especially considering comparative homes of the area in question.
- To improve the accuracy of this model, more data is needed, perhaps especially from home sales closer to the present day.
- Looking at data from a period of time longer than two years may also prove more accurate a model.



Thank you

I would be happy to answer any questions

You may find my contact information below:

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